



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,603	10/30/2001	Toshiya Nakamura	450100-03565	6532

20999 7590 01/14/2004

FROMMER LAWRENCE & HAUG
745 FIFTH AVENUE- 10TH FL.
NEW YORK, NY 10151

EXAMINER

DEBERADINIS, ROBERT L

ART UNIT	PAPER NUMBER
----------	--------------

2836

DATE MAILED: 01/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/016,603

Applicant(s)

NAKAMURA, TOSHIYA

Examiner

Robert DeBeradinis

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Specification

The abstract of the disclosure is objected to because it is too long. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4-6, 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over SUZUKI 5,811,895 in view of TSUJIKADO 6,597,074.

Regarding claims 1, 5, 6.

SUZUKI discloses a switching power supply section (14) for receiving a DC voltage as an input voltage at a primary side thereof, switching the inputted DC voltage and generating a stabilized output DC voltage at a secondary side thereof isolated from the primary side (11a); and a current detection section (column 5, lines 40-68) for generating a detection signal in response to supply current to said switching power supply section; said current detection section generating the detection signal isolated from the primary side.

SUZUKI also discloses controlling FET switch 20, to control the charging and discharging of battery (13), with a dedicated processor (column 4, lines 7-23).

Art Unit: 2836

SUZUKI does not disclose conveying the detection signal to equipment (15) connected to the secondary side of said switching power supply section.

TSUJIKADO discloses conveying detection of power switch activation (24) to equipment (12) for selecting power supplied by battery (abstract).

It would have been obvious to one having ordinary skill in the art at the time of this invention to modify SUZUKI to convey the detection signal to equipment (15) connected to the secondary side of said switching power supply section. The motivation would be to provide the selection means for selecting power from the battery during shutdown of the system load when the system load includes a computer.

Regarding claim 2.

SUSUKI discloses wherein said current detection section discriminates a supply state of the DC voltage inputted to the primary side (figure 1).

Regarding claims 4, 8.

SUSUKI discloses a rectification section for receiving an AC voltage as an input voltage and rectifying an AC voltage into a DC voltage (12), wherein the DC voltage outputted from said rectification section is inputted to said switching power supply section (14) (see figure 1).

Claims 3, 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over SUZUKI 5,811,895 in view of TSUJIKADO 6,597,074 in further view of WELK 4,360,853.

Regarding claims 3, 7.

SUZUKI in view of TSUJIKADO disclose the power device according to claim 1.

Art Unit: 2836

SUZUKI in view of TSUJIKADO does not disclose wherein said current detection section includes a photo-diode for generating a current detection signal.

WELK teaches wherein a photo-diode produces a light signal representative of the current therethrough (abstract).

It would have been obvious to one having ordinary skill in the art at the time of this invention to modify the above references wherein the current detector consisted of a photo-diode and a photo-transistor for generating a current detection signal. The motivation would be to provide high isolation between the primary side and the secondary side of the power supply device.

Any inquiry concerning this communication should be directed to Robert L. DeBeradinis whose number is (703) 306- 5857. The Examiner can normally be reached Monday-Friday from 8:30 am to 5:00 pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Brian Sircus, can be reached on (703) 308-31190. The Fax phone number for this Group is (703) 308-7722.

RLD

JANUARY 7, 2004

